

1. Find the equation of the line described below. Write the linear equation in the form $y = mx + b$ and choose the intervals that contain m and b .

Parallel to $4x + 7y = 6$ and passing through the point $(-10, 7)$.

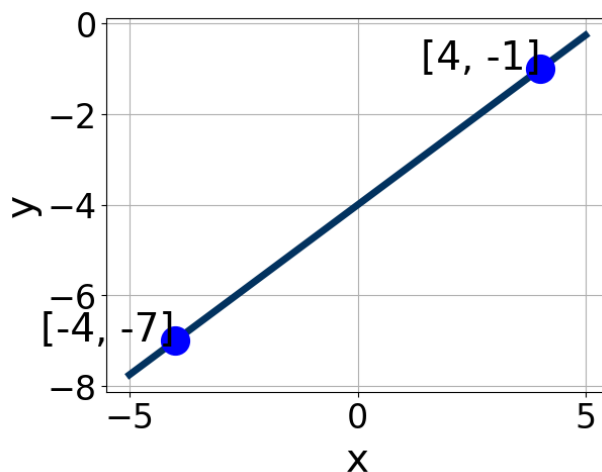
- A. $m \in [0.13, 0.63]$ $b \in [10.9, 13.8]$
- B. $m \in [-1.26, -0.23]$ $b \in [15.6, 17.4]$
- C. $m \in [-1.26, -0.23]$ $b \in [-1.4, -0.3]$
- D. $m \in [-1.26, -0.23]$ $b \in [1, 2.5]$
- E. $m \in [-1.86, -1.45]$ $b \in [1, 2.5]$
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2. Solve the equation below. Then, choose the interval that contains the solution.

$$-2(18x + 15) = -17(5x + 4)$$

- A. $x \in [-0.8, -0.75]$
- B. $x \in [-2.07, -1.94]$
- C. $x \in [-0.85, -0.8]$
- D. $x \in [1.97, 2.04]$
- E. There are no real solutions.
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3. Write the equation of the line in the graph below in Standard Form $Ax + By = C$. Then, choose the intervals that contain A , B , and C .



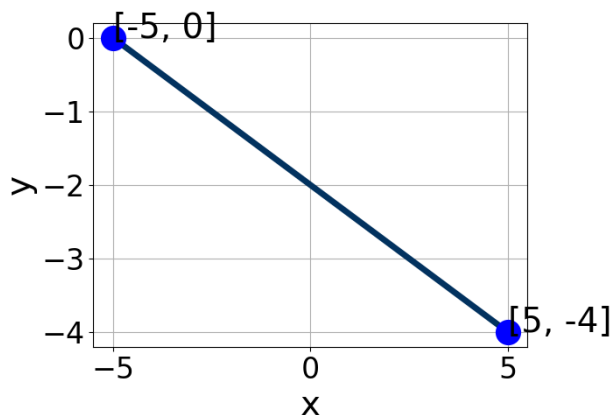
- A. $A \in [0, 11]$, $B \in [-4.9, -2.1]$, and $C \in [11, 17]$
- B. $A \in [-5, -2]$, $B \in [3, 5.3]$, and $C \in [-17, -13]$
- C. $A \in [0, 11]$, $B \in [3, 5.3]$, and $C \in [-17, -13]$
- D. $A \in [-1.75, 1.25]$, $B \in [-1.9, -0.3]$, and $C \in [4, 9]$
- E. $A \in [-1.75, 1.25]$, $B \in [-0.9, 3.9]$, and $C \in [-6, -3]$

4. Find the equation of the line described below. Write the linear equation in the form $y = mx + b$ and choose the intervals that contain m and b .

Perpendicular to $8x - 7y = 15$ and passing through the point $(-8, 2)$.

- A. $m \in [-0.95, -0.63]$ $b \in [9.4, 12.2]$
- B. $m \in [-0.95, -0.63]$ $b \in [4.8, 7.4]$
- C. $m \in [-0.95, -0.63]$ $b \in [-5.7, -4.2]$
- D. $m \in [-1.29, -0.91]$ $b \in [-5.7, -4.2]$
- E. $m \in [0.67, 0.93]$ $b \in [8.9, 9.9]$

5. Write the equation of the line in the graph below in Standard Form $Ax + By = C$. Then, choose the intervals that contain A , B , and C .



- A. $A \in [-0.74, 0.63]$, $B \in [-0.1, 3.7]$, and $C \in [-3, 0]$
- B. $A \in [-3.35, -0.07]$, $B \in [-8, -2.4]$, and $C \in [10, 15]$
- C. $A \in [0.71, 2.16]$, $B \in [3.6, 6.3]$, and $C \in [-16, -9]$
- D. $A \in [0.71, 2.16]$, $B \in [-8, -2.4]$, and $C \in [10, 15]$
- E. $A \in [-0.74, 0.63]$, $B \in [-2.5, 0.2]$, and $C \in [1, 9]$

6. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{4x + 7}{8} - \frac{-5x - 7}{4} = \frac{8x - 5}{2}$$

- A. $x \in [-8.12, -2.12]$
- B. $x \in [7.44, 11.44]$
- C. $x \in [-1.28, 1.72]$
- D. $x \in [1.28, 4.28]$
- E. There are no real solutions.

7. First, find the equation of the line containing the two points below. Then, write the equation in the form $y = mx + b$ and choose the intervals that contain m and b .

$(5, -11)$ and $(-5, 4)$

- A. $m \in [0.8, 4.6]$ $b \in [10.5, 16.5]$

- B. $m \in [-2.8, -1.2]$ $b \in [-22, -14]$
C. $m \in [-2.8, -1.2]$ $b \in [5, 11]$
D. $m \in [-2.8, -1.2]$ $b \in [-3.5, -0.5]$
E. $m \in [-2.8, -1.2]$ $b \in [1.5, 8.5]$
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8. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{5x + 4}{2} - \frac{3x - 7}{8} = \frac{3x - 6}{4}$$

- A. $x \in [-3.7, -2.4]$
B. $x \in [3.3, 4.5]$
C. $x \in [-14.5, -11.3]$
D. $x \in [-2.2, -1.2]$
E. There are no real solutions.
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9. Solve the equation below. Then, choose the interval that contains the solution.

$$-8(6x + 5) = -13(-4x + 7)$$

- A. $x \in [32.18, 33.29]$
B. $x \in [-0.06, 0.79]$
C. $x \in [0.69, 2.49]$
D. $x \in [-1.35, -0.65]$
E. There are no real solutions.
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10. First, find the equation of the line containing the two points below. Then, write the equation in the form $y = mx + b$ and choose the intervals that contain m and b .

$$(7, -11) \text{ and } (-7, -10)$$

- A. $m \in [-0.11, -0.06]$ $b \in [9.03, 10.59]$
 - B. $m \in [-0.11, -0.06]$ $b \in [-11.27, -10.49]$
 - C. $m \in [-0.11, -0.06]$ $b \in [-4.6, -1.23]$
 - D. $m \in [-0.11, -0.06]$ $b \in [-18.5, -16.95]$
 - E. $m \in [0.04, 0.16]$ $b \in [-9.63, -9.42]$
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